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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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2352	7590	06/13/2006	EXAMINER	
OSTROLENK FABER GERB & SOFFEN 1180 AVENUE OF THE AMERICAS NEW YORK, NY 100368403			AMIRI, NAHID	
			ART UNIT	PAPER NUMBER
			3679	

DATE MAILED: 06/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/500,583	Applicant(s) WEBJORN, JAN	
	Examiner Nahid Amiri	Art Unit 3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 10-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 June 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>03/20/2006</u> . | 6) <input checked="" type="checkbox"/> Other: <u>exhibit</u> . |

DETAILED ACTION

Response to Amendment

In view of Applicant's Amendment received 20 March 2006, amendments to the claims have been entered. Claims 1-8 and 10-14 are pending.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, **the first end surface comprises more than once concave part surface in the radial direction**", claim 5 and 14, lines 1-2; **the at least a part of a transition area between the surface of the flange directed away from the end surface and a part of the flanged member that is substantially parallel to a longitudinal axis of the member that is shaped as a substantially elliptical area**, claim 10, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claims 1 and 8 are objected to because of the following informalities: the change made to line 4 of claim 1 renders the recitation not grammatically correct. In particular, the inclusion of “a” leaves one to wonder what “another” refers to. Claim 8, lines 1-4, the reference characters (X, a, and b) should be in parentheses. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-8 and 10-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claims 1-8 and 10-14, it should be noted that the preamble of claims set forth only “a flange” subcombination, intended to be used in a flanged joint. As initially set forth, the elements of the combination are not positively claimed, e.g. claim 1, line 3, applicant sets forth “a first end surface” **intended to be** assembled together with a corresponding end surface of a flanged end an another”. However, claim 1, line 4, then begins to positively include elements of the combination, e.g., “a second flange”. Accordingly, it is unclear as to whether the combination or subcombination is being claimed. For this Office action, it is presumed that only the subcombination of “a flanged member” is being claimed. If applicant intends for the combination to be claimed, then the preamble must be amended accordingly. Further with respect to claim 1, it is unclear how “A flanged member” can be constituted by two flange members. If more than one flanged member is being required, then the preamble cannot continue to imply that only a single flanged member is being defined. Further still, it is unclear how a curved surface can be determined to be “inclined”. It is also inappropriate to seek to define a claimed element based on a comparison to unclaimed elements. Accordingly, the feature of the last two lines should be defined based on the single flanged member. Finally, it is

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not clear what is meant by a “conceived” opposite end surface. Is this an actual surface or merely one that has been thought up? This also applies to claim 11, line 9.

With respect to claim 4, it is unclear as to how a concave surface inclined away from an opposing surface of a second flanged member can contact such surface and thus constitute a “contact surface”.

With respect to claim 5, it is not clear what constitutes a “part” surface. Is this merely an arbitrary division of the surface into “parts”, e.g., a radially innermost “part” and a radially outermost “part”?

With respect to claim 6, it is not clear what element is being compared to the abutment point such that one can determine that the abutment point is “farthest in the radial direction”.

With respect to claim 7, it is unclear how the innermost abutment point can be “farthest in the radial direction”. Is this claim intending that there is only one abutment point, i.e., both the innermost and outermost point?

With respect to claim 10, it is not known what transition area applicant is referring to and thus it is not known what is supposed to be elliptical.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1-8 and 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 2,940,779 Buono.

With respect to claim 1, Buono discloses a flanged member (14, Figs. 1-3) intended to included as a first component in a flange comprising a first component (14) in a flanged joint

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having a first flanged end (E) with a first end surface (30) intended to be assembled together with a corresponding end surface (16) of a flanged end (E', see attachment) on another, a second flanged member (12) in the flanged joint, the first end surface (30) of the first flange (14) is concave which formed from multi-straight lines, wherein in unstressed condition is slightly concave in the radial direction over at least a part of the extension thereof in the radial direction; and wherein in an unstressed condition, the first end surface (30) is inclined in the radial direction, outward and away from a conceived opposite end surface of the second component (12). Buono does not disclose the concave of the first end surface is curved. It would have been obvious to one of ordinary skill in the art at the time of invention was made to form the concave of the first end surface as a curve instead of forming it from multi-straight lines, since it has been held that omission of an element and its function in a combination where the remaining elements perform the same function as before involves only routine skill in the art. In re Karlson, 136 USPQ 184.

With respect to claim 2, Buono discloses (Figs. 1-3) wherein the first end surface (30) is concave over the entire extension thereof in the radial direction.

With respect to claim 3, Buono discloses (Figs. 1-3) wherein the first end surface (30) is concave in the radial direction over at least an area that will be subjected to deforming forces when the flanged member (14) is assembled together with another flanged member (14 as well as during use.

With respect to claim 4, Buono discloses (Figs. 1-3) wherein the first end surface (30) is concave in the radial direction over essentially that area which, during use, constitutes a contact surface against the corresponding end surface (16) of the second flanged member (12).

With respect to claims 5 and 14, Buono discloses (Figs. 1-3) wherein the first end surface (30) comprises more than one concave part surface in the radial direction; and wherein the part surface has different radii of curvature.

With respect to claim 6, Buono discloses (Figs. 1-3) that further comprising an internal through axial opening (A) (see attachment), the first end surfaces (30) having an innermost

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abutment point against the corresponding end surface (16) of the second flanged member (12), which abutment point is situated farthest in the radial direction at the opening (A), the concavity of the first end surface (30) extending all the way in to the abutment point.

With respect to claim 7, Buono discloses (Figs. 1-3) wherein the first end surface (30) has an innermost abutment point against the corresponding end surface (16) of the second flanged member (12), which has an internal through axial opening (A), the innermost abutment point being situated farthest in the radial direction, at the opening (A), the concavity of the first end surface (30) extending all the way in to the abutment point.

With respect to claim 8, Buono discloses the claimed invention except for the conceived straight X that connects an innermost point of a first end surface in the radial direction, with an outermost point b thereof, in the radial direction, has a length L_x and the concavity of the end surface has a maximum depth D_k in relation to a conceived plane surface produced by said line X, which depth D_k is of the order of 0.01%-2% of L_x . It would have been an obvious matter of design choice to construct the concavity of end surface with Applicant's specific dimension since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

With respect to claim 10, Buono discloses (Fig. 1) wherein at least a part of a transition area (T) (see attachment), between the surface of the flange directed away from the end surface (30) and a part of the flanged member that is substantially parallel to a longitudinal axis of the member, is shaped as a substantially elliptical area.

With respect to claim 11, Buono discloses a Joint (Figs. 1-3) comprising two joint halves formed as two flanged members (12, 14) and included in a pressure equipment device, the members (12, 14) have at least one flanged end (E, E') each having an end surface (30, 16), and the flanged members (12, 14) are assembled together via the end surfaces (16, 30) of the flanged ends (E, E'), the end surfaces (16, 30) are facing each other, the end surface (30) of at least one of the flanged members (14) being slightly concave in a radial direction over at least a part of an extension thereof in the radial direction when the end surface is in an unstressed condition.

With respect to claim 12, Buono discloses (Figs. 1-3) wherein both of the flanged members (12, 14) have a concave end surface.

With respect to claim 13, Buono discloses (Figs. 1-3) wherein the end surfaces (30, 16) facing each other are inclined in the radial direction outwards so that they, in radial cross-section, form an angle to each other, when they have been brought together but before assembly, which angle is such that a distance between the two end surfaces (30, 16) increases in the radial direction outwards, at least one of said inclined end surfaces being slightly concave.

Response to Arguments

Applicant's arguments, filed 20 March 2006, with respect to claims 1-8 and 10-14 have been fully considered and are persuasive. The rejection of claims has been withdrawn.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action, e.g. claim 1, line 1, the limitation of "A flanged"; lines 6-7, "such that it is curved and limited by a curve being a concave function; and lines 9-10, "in an unstressed condition, said first end surface is inclined in the radial direction, outwards and away from a conceive opposite end surface of said second component" was not claimed in original claimed invention. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nahid Amiri whose telephone number is (571) 272-8113. The examiner can normally be reached on 8:30-5:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Nahid Amiri
Examiner
Art Unit 3679
May 16, 2005



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A. J. DEL BUONO
BALANCED FACE FLANGE
Filed Nov. 8, 1957

Filed Nov. 8, 1957



Atticus